Quincy
QR-25® Series
Model 340

Parts Manual · Record of Change 106

This manual contains important safety information and should be made available to all personnel who operate and/or maintain this product. Carefully read this manual before attempting to operate or perform maintenance on this compressor.

Fill Out & Return
Warranty Registration Card Located Inside

Quincy Compressor®

True Blue Reliability™

Manual No. 50216-106

October 2001 Edition

INTRODUCTION

This manual provides information for the following QR-25 Series, Model 340 (Record of Change 106) compressor versions:

P **Control Version P**
plain head assembly & no controls

PUL **Control Version PUL**
plain head assembly with a pressure relief valve

L **Control Version L**
head assembly with 2 unloader towers & a hydraulic unloader

S **Control Version S**
head assembly with 2 unloader towers & a pilot valve

LS **Control Version LS**
head assembly with 2 unloader towers, a hydraulic unloader, & a pilot valve with a check valve assembly

LVD **Control Version LVD**
head assembly with 2 unloader towers, a hydraulic unloader, & a pilot valve with a lockout & check valve

These compressors are aircooled, two stage, two cylinder, pressure lubricated compressors, with up to 200 p.s.i. continuous pressure capability *(201 to 500 p.s.i. intermittent pressure capability with proper configuration; consult factory)*. The Model 340 has a 5-1/4" low pressure bore, a 3" high pressure bore, a 3-1/2" stroke and can be run at 400-900 r.p.m.

Available options included in this manual:
-hooded air filter
-hooded air filter / silencer
-high pressure rated cylinder and head

CHANGES

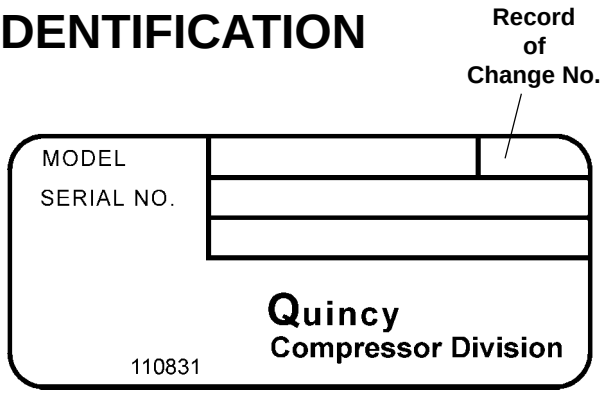
since previous printing dated July 2000:

-Record of Change 106 involved redesigned head and intercooler.

TABLE OF CONTENTS

Serial Number Identification 2
Ordering Replacement Parts 2
Quin-Cip Oil 2
Crankcase Lubricant Capacity 2
Crankshaft Group 3
Crankcase Group 4
Bearing Carrier Groups
with oil filter 5-6
less oil filter 7-8
Connecting Rod & Piston Groups
low pressure 9-10
high pressure 11-12
Cylinder & Head Groups
Control Version P 13
Control Versions L, S, LS, LVD 14
Head Assemblies
Control Versions P 15
Control Versions L, S, LS, LVD 16
Suction Valve Assembly 17
Discharge Valve Assembly 18
Unloader Assembly 19
Pneumatic Unloader Assembly 20
Control Groups
Version L 21
Version S 22
Version LS 23
Version LVD 24
Pilot Valves 25
Pilot Valve Repair Kit 25
Differential Setting Charts 25
Suction Valve Unloader Assemblies 26
Hydraulic Unloader Assemblies 27
Decals 28
Gasket Set 28
Recommended Spare Parts 28
Kits 28
Typical Unit Repair Parts List 29

MODEL & SERIAL NUMBER IDENTIFICATION



Model & Serial Number Identification Tag

The model & serial number tag is located on the handhole plate side of the crankcase. Fill in the numbers from your compressor's tag in the corresponding spaces provided here and reference this page when ordering replacement parts.

All replacement parts are to be ordered through an authorized Quincy Compressor Distributor. Insist on genuine Quincy parts only! Failure to do so may void warranty.

ORDERING REPLACEMENT PARTS

Prompt service can be rendered on repair parts orders if the following information is given:

Item 1) the model number, record of change number, & serial number.

Item 2) the exact part number needed. (Do not order by item numbers.)

Item 3) the exact quantity needed.

Item 4) the preferred type of transportation

QUIN-CIP® OIL

Refer to the chart below to order Quin-Cip compressor oil from your local Authorized Quincy Distributor.

Package	Part No.	Description
Barrel	112541D032	55 gal., SAE 10W
Pail	112541P032	5 gal., SAE 10W
Gallon	112541G032	1 gal., SAE 10W
Gallon Case	112541X032	(4)-1 gal., SAE 10W
Quart	112541Q032	1 qt., SAE 10W
Quart Case	112541C032	(12)-1 qt., SAE 10W
Barrel	112542D068	55 gal., SAE 20
Pail	112542P068	5 gal., SAE 20
Gallon	112542G068	1 gal., SAE 20
Gallon Case	112542X068	(4)-1 gal., SAE 20
Quart	112542Q068	1 qt., SAE 20
Quart Case	112542C068	(12)-1 qt., SAE 20
Barrel	112543D100	55 gal., SAE 30
Pail	112543P100	5 gal., SAE 30
Gallon	112543G100	1 gal., SAE 30
Gallon Case	112543X100	(4)-1 gal., SAE 30
Quart	112543Q100	1 qt., SAE 30
Quart Case	112543C100	(12)-1 qt., SAE 30

CRANKCASE LUBRICANT CAPACITY

Model	Less Filter	With Filter
QR-340	$4\frac{3}{4}$ qts. (4.5 lit.)	Add 10 oz. (296 ml)

CAUTION !

Refer to the QR-25 Series Instruction Manual for vital lubrication information.

CAUTION !

Follow all safety precautions outlined in the QR-25 Series instruction manual.

WARNING !

Do not operate this compressor without a totally enclosed belt guard or any other required safety equipment.

DANGER !

Air used for breathing or food processing must meet O.S.H.A. 1910.134 or F.D.A. 21 C.F.R. 178.3570 regulations.

CRANKSHAFT GROUP 110524

Item Number	Qty.	Part Number	Description
1	1	110519	crankshaft assembly includes:
1.1	1	110518R	crankshaft
1.2	1	40775	bearing cone
1.3	1	2788	bearing cone
1.4	1	110234	orifice, 1/8 npt
1.5	2	121160	pipe plug, 1/8 npt
1.6	1	110705-F17	roll pin, 3/16 x 1.38
2	1	110523X	sheave assembly includes:
2.1	1	5836R	sheave, 19-1/2", 4 gr, B sect., CCW (N.S.S.: order 110523X)
2.2	2	124571-N22	hex. screw, 1/2-20 unf x 3.25, grade 5 (@ 90 ft.-lbs.)
2.3	2	124373-N02	square nut, 1/2-20 unf
3	1	1466	taper key

CRANKSHAFT GROUP 110524-001

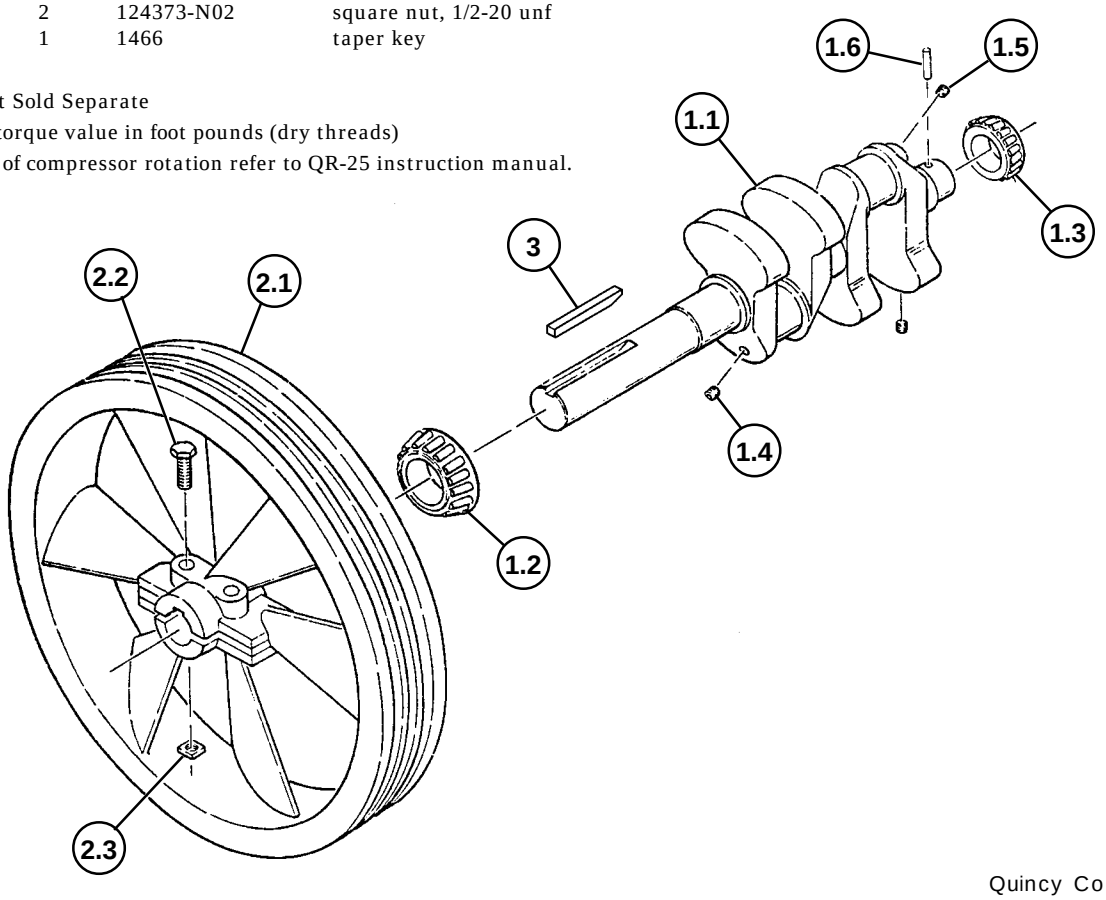
(for basic compressors used on FE 340 units)

Item Number	Qty.	Part Number	Description
1	1	110519	crankshaft assembly includes:
1.1	1	110518R	crankshaft
1.2	1	40775	bearing cone
1.3	1	2788	bearing cone
1.4	1	110234	orifice, 1/8 npt
1.5	2	121160	pipe plug, 1/8 npt
1.6	1	110705-F17	roll pin, 3/16 x 1.38
2	1	110975X	sheave assembly includes:
2.1	1	110975R	sheave, 16", 2 gr, B sect., CCW (N.S.S.: order 110975X)
2.2	2	124571-N22	hex. screw, 1/2-20 unf x 3.25, grade 5 (@ 90 ft.-lbs.)
2.3	2	124373-N02	square nut, 1/2-20 unf
3	1	1466	taper key

N.S.S. = Not Sold Separate

@ Indicates torque value in foot pounds (dry threads)

For reversal of compressor rotation refer to QR-25 instruction manual.

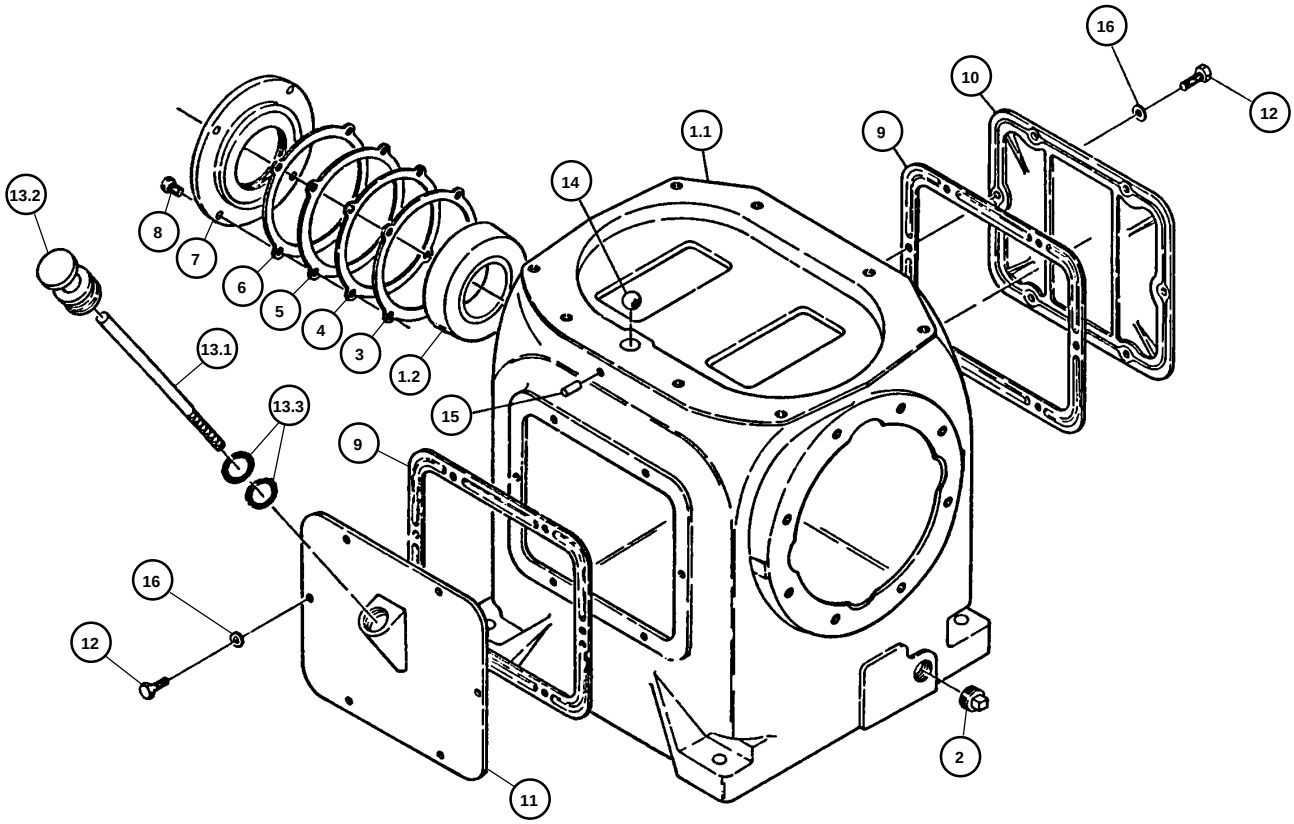


CRANKCASE GROUP 110628-002

Item Number	Qty.	Part Number	Description
1	1	6904X	crankcase assembly
1.1	1	6904R	crankcase (N.S.S.; order 6904X)
1.2	1	3720	bearing cup
2	1	2057	pipe plug, 1/2 npt
3	*	1383	bearing adjustment shim, .005 steel
4	*	1383A	bearing adjustment shim, .007 steel
5	*	1383B	bearing adjustment shim, .020 steel
6	*	1383D	bearing adjustment shim, .002 steel
7	1	6930	adjustment plate (.0015 / .003 crankshaft end play)
8	4	123478-L12	hex. screw, 3/8-16 unc x 1.00, grade 5 (@ 30 ft.-lbs.)
9	2	1315	inspection plate gasket
10	1	1249-1	inspection plate
11	1	6849-1	inspection plate
12	12	123478-K12	hex. screw, 5/16-18 unc x 1.00, grade 5 (@ 12 ft.-lbs.)
13	1	6726X001	oil gauge assembly
13.1	1	5488-001	oil gauge rod (N.S.S.; order 6726X001)
13.2	1	6726	oil gauge knob (N.S.S.; order 6726X001)
13.3	2	123157-210	"o"ring, 1/8" wide x 1.00 o.d.
14	1	5783	breather ball
15	1	5932	drive pin
16	12	110428N031	flatwasher, 5/16

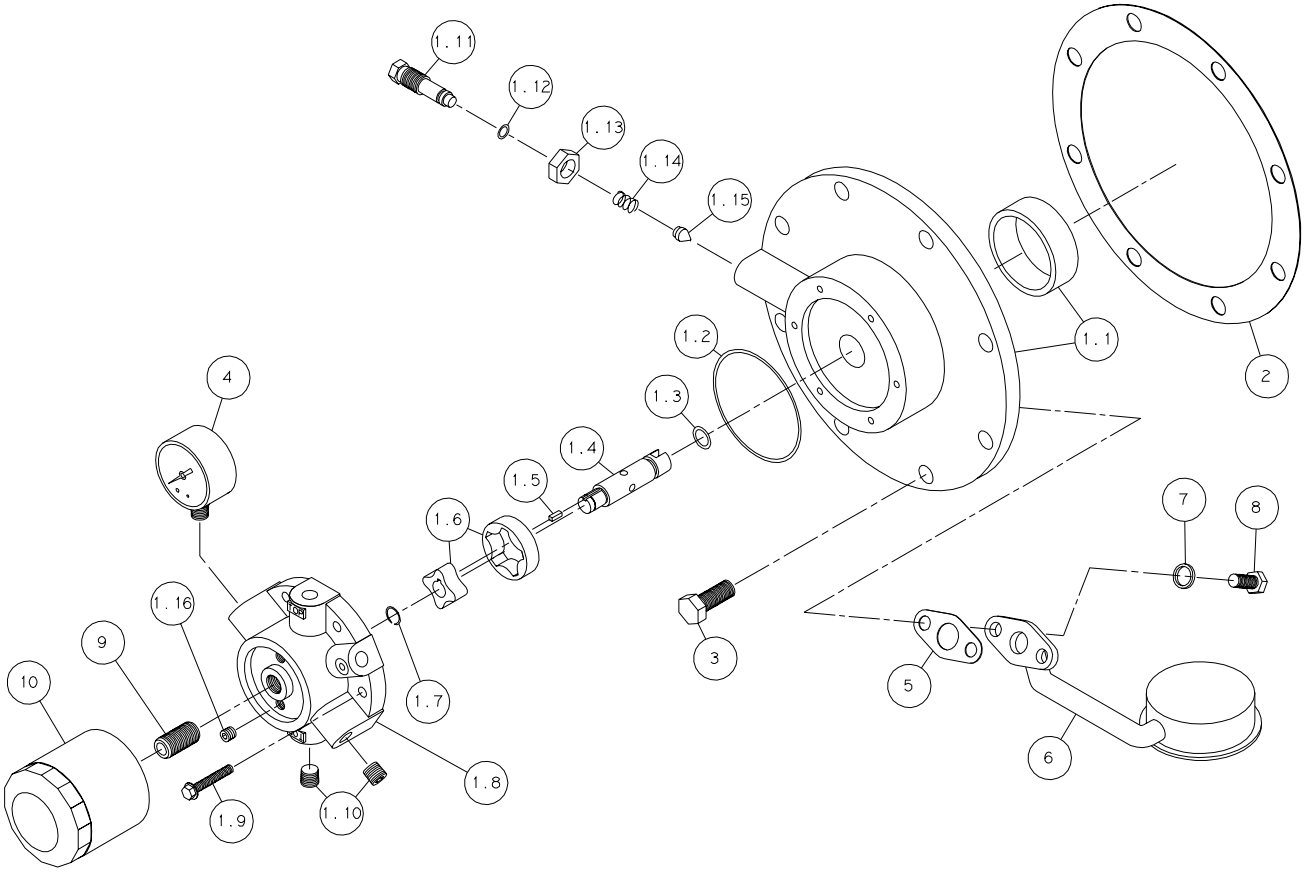
N.S.S. = Not Sold Separate

@ Indicates torque value in foot pounds (dry threads)



BEARING CARRIER GROUP 110820-001

(with oil filter)



BEARING CARRIER GROUP 110820-001

(with oil filter)

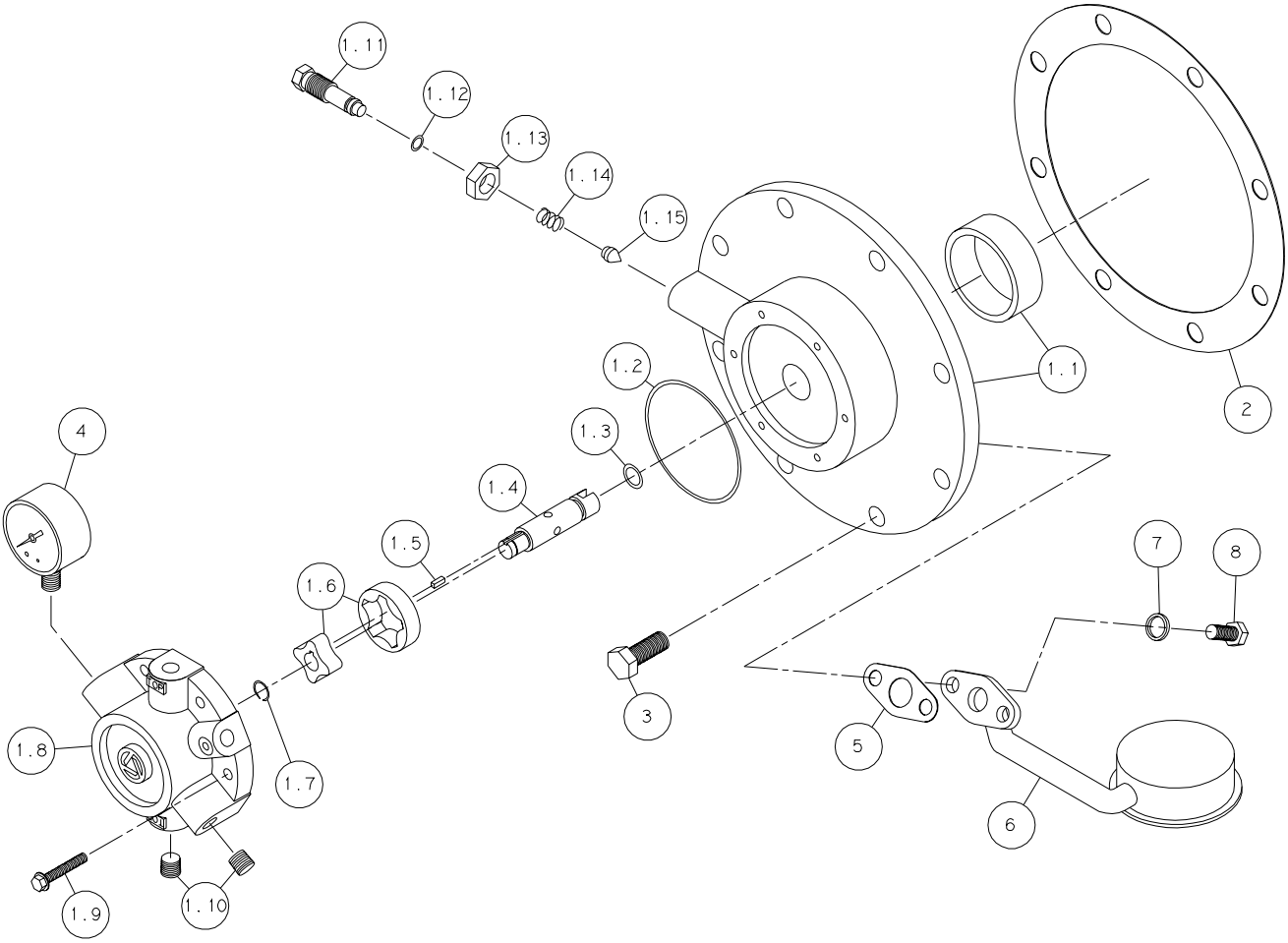
Item Number	Qty.	Part Number	Description
*1	1	110812-003	bearing carrier assembly
1.1	1	110812	bearing carrier assembly includes:
	1	2720	bearing cup
	2	160005	bronze bushing
* 1.2	1	123157-152	"o"ring, 3/32 wide x 3.44 o.d.
* 1.3	1	123157-112	"o"ring, 3/32 wide x .69 o.d.
1.4	1	160002-001	bearing carrier driveshaft
1.5	1	160075-001	driveshaft key
1.6	1	160003	pump gerotor
1.7	1	6285	retaining ring
1.8	1	110813-001	oil pump housing
1.9	6	123777-J12	hex screw, 1/4-20 unc x 1.00, grade 5 (@ 6 ft.-lbs.)
1.10	2	2719	pipe plug, 1/4 npt
1.11	1	5489	adjustment screw
* 1.12	1	123157-011	"o"ring, 1/16 wide x .44 o.d. (oil pressure adjustment screw)
1.13	1	124369-P02	jamnut, 9/16-18 unf
1.14	1	1160	spring
1.15	1	112857	needle valve
1.16	1	121160	pipe plug, 1/8 npt
2	1	5502	bearing carrier gasket
3	8	123478-L12	hex. screw, 3/8-16 unc x 1.00, grade 5 (@ 30 ft.-lbs.)
§ 4	1	110822	oil pressure gauge
5	1	6679	gasket, oil inlet bracket
6	1	110659	oil pickup tube
7	2	123115-06C	lockwasher, 3/8
8	2	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 30 ft.-lbs.)
9	1	110825	oil filter stud
			Maintenance Parts
*10		110814-001	oil filter (six pack)
		160079	**Oil Pump Repair Kit** (includes 1 each of items 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, & 1.12)
		110812X003	**Replacement Bearing Carrier Assembly** (includes 1 each of items 1, 2, 5, 9, & 1 oil filter)

* Can not be used with diester or phosphate ester based synthetic lubricants.

§ Install with Teflon® tape.

BEARING CARRIER GROUP 110820

(less oil filter)



BEARING CARRIER GROUP 110820

(less oil filter)

Item Number	Qty.	Part Number	Description
1	1	110812-002	bearing carrier assembly
1.1	1	110812	bearing carrier assembly includes:
	1	2720	bearing cup
	2	160005	bronze bushing
* 1.2	1	123157-152	"o"ring, 3/32 wide x 3.44 o.d.
* 1.3	1	123157-112	"o"ring, 3/32 wide x .69 o.d.
1.4	1	160002-001	bearing carrier driveshaft
1.5	1	160075-001	driveshaft key
1.6	1	160003	pump gerotor
1.7	1	6285	retaining ring
1.8	1	110813	oil pump housing
1.9	6	123777-J12	hex screw, 1/4-20 unc x 1.00, grade 5 (@ 6 ft.-lbs.)
1.10	2	2719	pipe plug, 1/4 npt
1.11	1	5489	adjustment screw
* 1.12	1	123157-011	"o"ring, 1/16 wide x .44 o.d. (oil pressure adjustment screw)
1.13	1	124369-P02	jamnut, 9/16-18 unf
1.14	1	1160	spring
1.15	1	112857	needle valve
2	1	5502	bearing carrier gasket
3	8	123478-L12	hex. screw, 3/8-16 unc x 1.00, grade 5 (@ 30 ft.-lbs.)
§ 4	1	110822	oil pressure gauge
5	1	6679	gasket, oil inlet bracket
6	1	110659	oil pickup tube
7	2	123115-06C	lockwasher, 3/8
8	2	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 30 ft.-lbs.)

Maintenance Parts

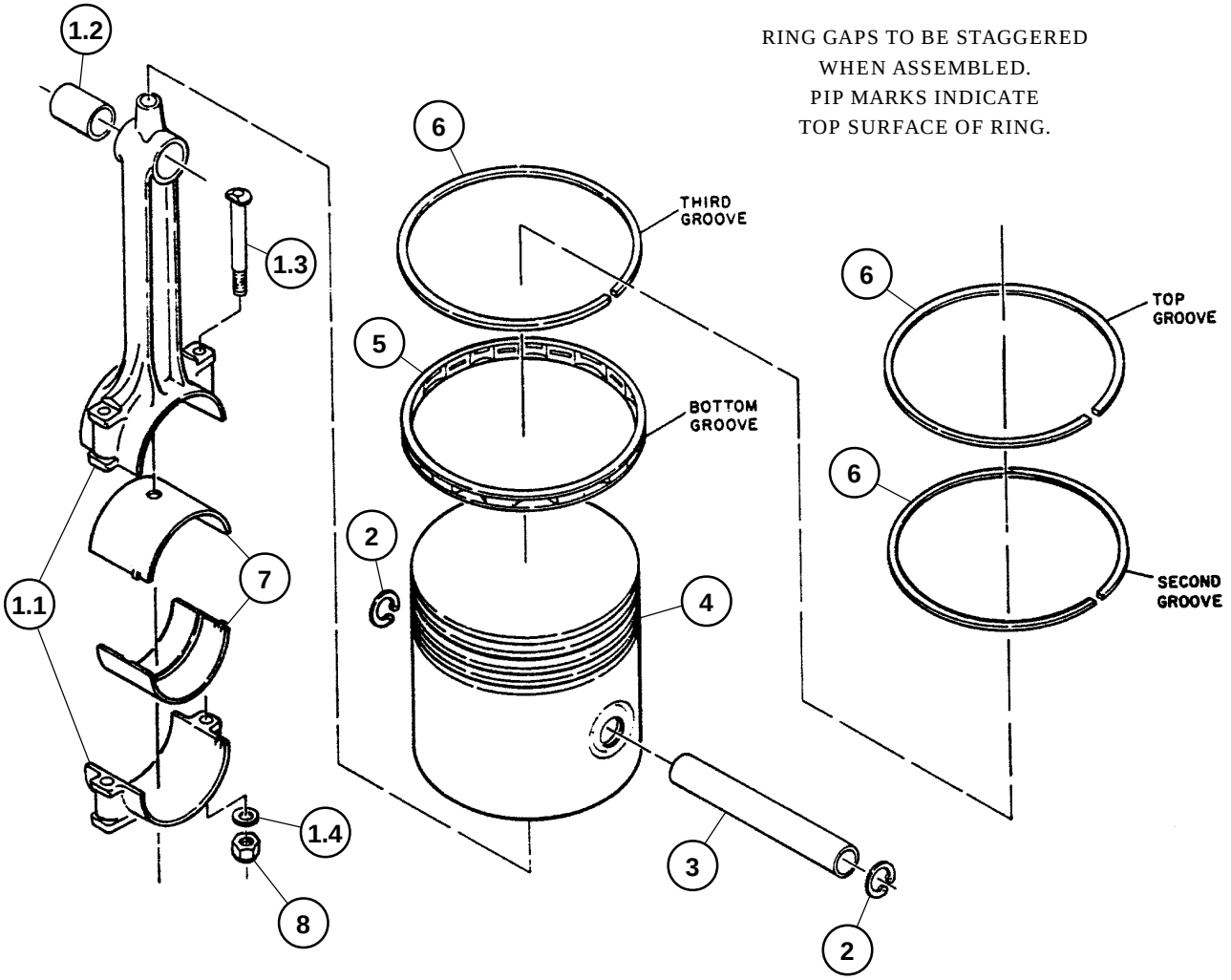
160079	**Oil Pump Repair Kit** (includes 1 each of items 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, & 1.12)
110812X002	**Replacement Bearing Carrier Assembly** (includes 1 each of items 1, 2, & 5)

* Can not be used with diester or phosphate ester based synthetic lubricants.

§ Install with Teflon® tape.

CONNECTING ROD & PISTON GROUP 110749

(low pressure)



CONNECTING ROD & PISTON GROUP 110749

(low pressure)

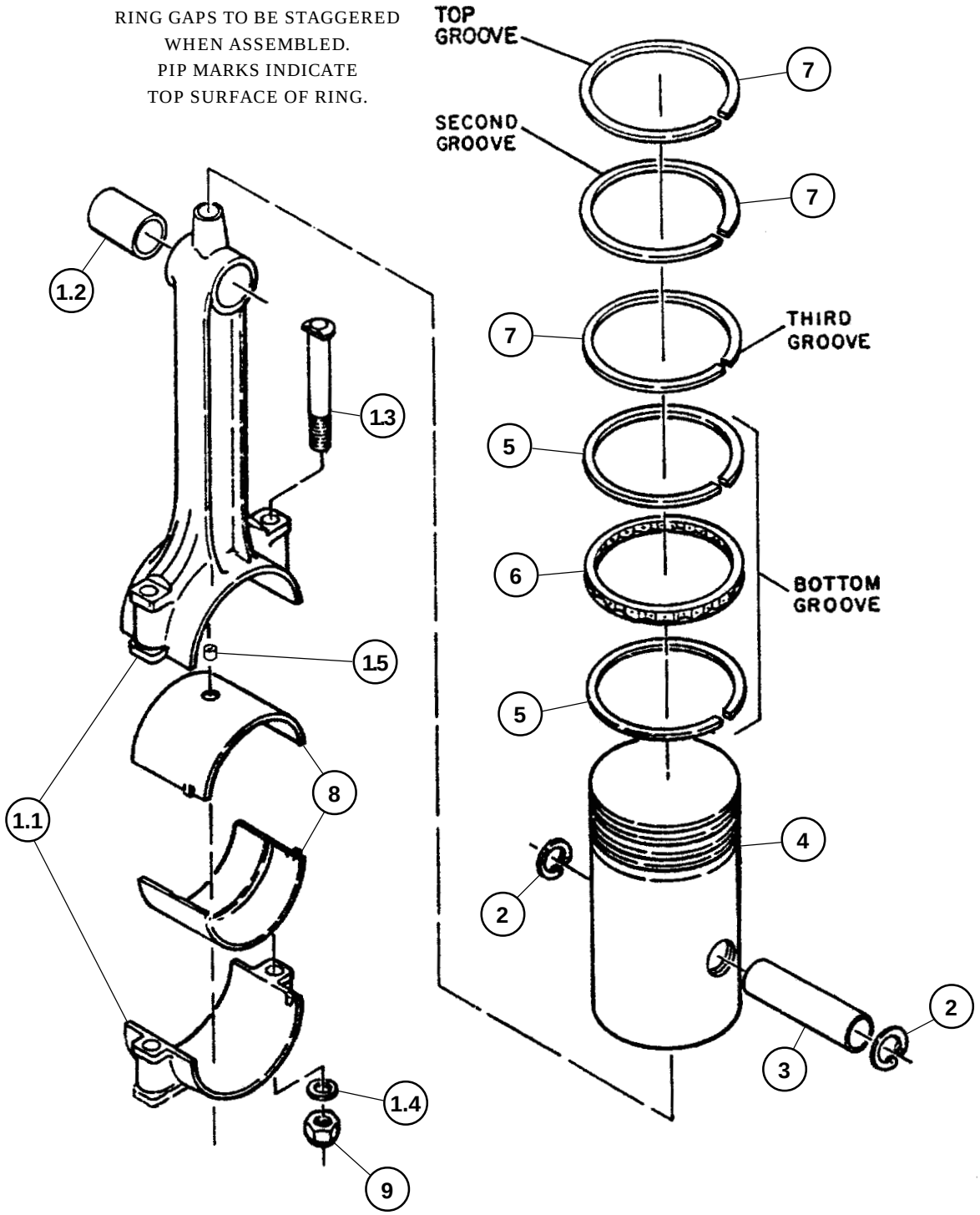
Item Number	Qty.	Part Number	Description
1	1	40081	connecting rod assembly (N.S.S.; order 6655X)
1.1	1	110802R	connecting rod (N.S.S.; order 6655X)
1.2	1	6443	connecting rod bearing (N.S.S.; order 6443SR)
1.3	2	1344	connecting rod bolt, 7/16-20 unc x 3.25
1.4	2	1319	connecting rod bolt washer
2	2	8648	retaining ring
3	1	110146	piston pin
4	1	8642	piston
5	1	2033	oil ring
6	3	9666	piston ring
7	2	6656	connecting rod insert (sold in pairs only; see maintenance parts)
8	2	124471-M08	locknut, 7/16-20 unf (@ 40 ft.-lbs.)
			Maintenance Parts
7	1	6656PR	inserts, connecting rod (1 pair, standard size)
7	1	6656-010PR	inserts, connecting rod (1 pair, .010 undersize)
1.2	1	6443SR	replacement connecting rod bearing
4	1	8642-010	piston, low pressure (.010 oversize)
4	1	8642-020	piston, low pressure (.020 oversize)
	1	**7595A**	**Piston Ring Set (standard)** includes piston rings & oil ring
	1	**4450-010**	**Piston Ring Set (.010 oversize, light blue color code)** includes includes piston rings & oil ring
	1	**4450-020**	**Piston Ring Set (.020 oversize, yellow color code)** includes includes piston rings & oil ring
	1	**8642X**	**Piston Assembly, low pressure (standard)** includes ring set, piston pin, retaining rings, & piston
		8642X010	**Piston Assembly, low pressure (.010 oversize)** includes ring set, piston pin, retaining rings, & piston
		8642X020	**Piston Assembly, low pressure (.020 oversize)** includes ring set, piston pin, retaining rings, & piston
		6655X	**Replacement Connecting Rod Assembly** includes connecting rod assembly, connecting rod inserts, & locknuts

N.S.S. = Not Sold Separate

@ Indicates torque value in foot pounds (dry threads)

CONNECTING ROD & PISTON GROUP 110750

(high pressure)



CONNECTING ROD & PISTON GROUP 110750

(high pressure)

Item Number	Qty.	Part Number	Description
1	1	110804	connecting rod assembly (N.S.S.; order 110804X)
1.1	1	110802	connecting rod (N.S.S.; order 110804X)
1.2	2	110799-010	needle bearing
1.3	2	1344	connecting rod bolt, 7/16-20 unc x 3.25
1.4	2	1319	connecting rod bolt washer
1.5	1	110801-001	orifice plug
2	2	8648	retaining ring
3	1	110190-008	piston pin
4	1	2008-001	piston
5	2	6451	oil ring rail
6	1	6450	expander ring
7	3	1648	piston ring
8	2	6656	connecting rod insert (sold in pairs only; see maintenance parts)
9	2	124471-M08	locknut, 7/16-20 unf (@ 40 ft.-lbs.)
			Maintenance Parts
8	1	6656PR	inserts, connecting rod (1 pair, standard size)
8	1	6656-010PR	inserts, connecting rod (1 pair, .010 undersize)
4	1	2008-011	piston, high pressure (.010 oversize)
4	1	2008-021	piston, high pressure (.020 oversize)
	1	**6452A**	**Piston Ring Set (standard)**
			includes piston rings, oil ring rails & expander
	1	**4425-010**	**Piston Ring Set (.010 oversize, light blue color code)**
			includes includes piston rings, oil ring rails & expander
	1	**4425-020**	**Piston Ring Set (.020 oversize, yellow color code)**
			includes includes piston rings, oil ring rails & expander
	1	**2008X001**	**Piston Assembly, high pressure (standard)**
			includes ring set, piston pin, retaining rings, & piston
		2008X011	**Piston Assembly, high pressure (.010 oversize)**
			includes ring set, piston pin, retaining rings, & piston
		2008X021	**Piston Assembly, high pressure (.020 oversize)**
			includes ring set, piston pin, retaining rings, & piston
		110804X	**Replacement Connecting Rod Assembly**
			includes connecting rod assembly, connecting rod inserts, & locknuts

N.S.S. = Not Sold Separate

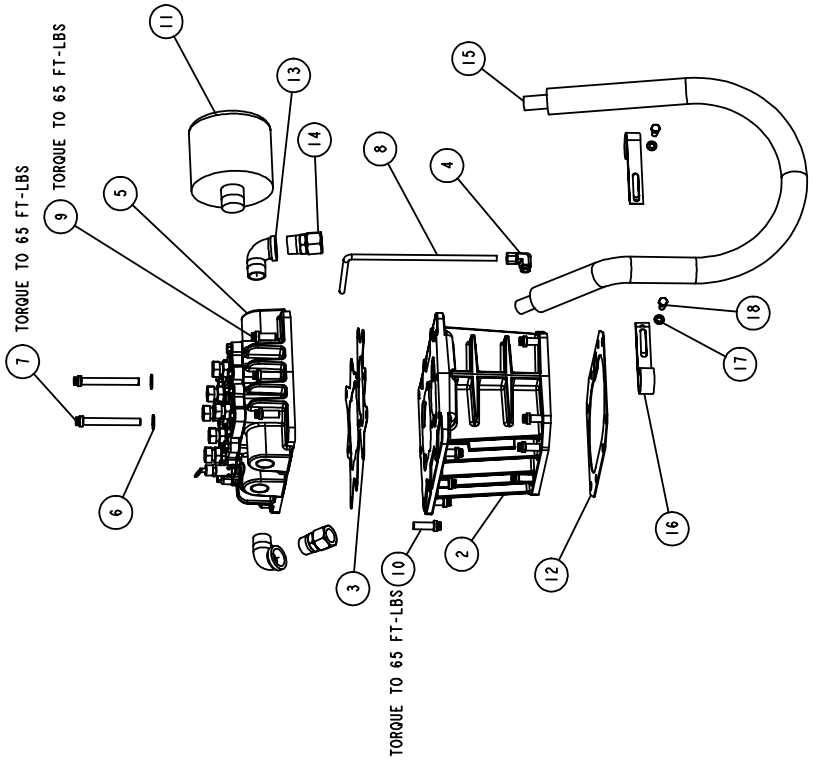
@ Indicates torque value in foot pounds (dry threads)

CYLINDER & HEAD GROUP 115047-001

(control version P)

GROUP, HEAD & CYLINDER 115047-001 BILL OF MATERIALS			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	115047-001	1	GROUP, HEAD & CYLINDER
2	6654-1	1	CYLINDER
3	6680	1	GASKET, HEAD TO CYLINDER
4	2728	1	TUBE FITTING, 90 MALE ELBOW, 3/8 TUBE X 3/8 NPT
5	114984P	1	HEAD ASSEMBLY, PLAIN
6	1478-1	2	FLATWASHER
7	5863	2	COUNTERBORE SCREW, 1/2-13 UNC X 4.50, GRADE 8
8	110515-038	1	COPPER TUBE 3/8 O.D.
9	90386-N14	16	COUNTERBORE SCREW, 1/2-13 UNC X 1.25, GRADE 8
10	90386-N15	2	COUNTERBORE SCREW, 1/2-13 UNC X 1.50, GRADE 8
11	110377S125	1	HOODED AIR FILTER/SILENCER
12	5827-2	1	GASKET, CYLINDER TO CRANKCASE
13	21730	2	PIPE ELBOW, 1 NPT X 1 NPT, 90
14	23358	2	TUBE FITTING, MALE CONN, 1 X 1 NPT
15	115038	1	INTERCOOLER
16	114574	2	INTERCOOLER CLAMP
17	123115-06C	2	LOCKWASHER, 3/8
18	123478-L10	2	HEX, SCREW, 3/8-16 UNC X .75, GRADE 5
			OPTIONAL PARTS
	110377F125	1	AIR FILTER
	110377H125	1	AIR FILTER, HOODED
			MAINTENANCE PARTS
	110377E100	1	AIR FILTER ELEMENT
	114984X31P		REPLACEMENT HEAD ASSEMBLY INCLUDES ITEMS 3 & 5 (1 EACH)
	115038K		INTERCOOLER REPLACEMENT KIT INCLUDES INTERCOOLER, NUTS AND SLEEVES.

* TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN, EVENLY BRINGING EACH BOLT TO TORQUE IN EQUAL INCREMENTS, WHILE MOVING ABOUT THE BOLT PATTERN.
* HIGH PRESSURE COMPRESSORS AND DNV CERTIFIED APPLICATIONS REQUIRE 114984HP HEAD IN LIEU OF 114984 HEAD AND 6654-1HP CYLINDER IN LIEU OF 6654-1 CYLINDER.

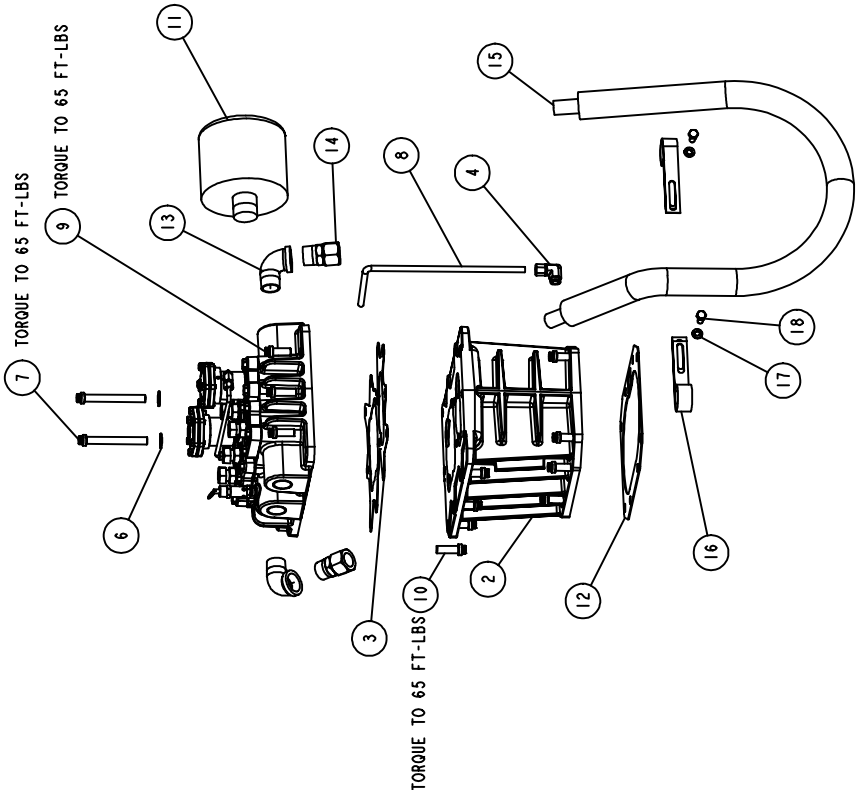


CYLINDER & HEAD GROUP 115047-002

(control versions L, S, LS & LVD)

GROUP, HEAD & CYLINDER 115047-002 BILL OF MATERIALS			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	115047-002	1	GROUP, HEAD & CYLINDER
2	6654-1	1	CYLINDER
3	6680	1	GASKET, HEAD TO CYLINDER
4	2728	1	TUBE FITTING, 90 MALE ELBOW, 3/8 TUBE X 3/8 NPT
5	114984UU	1	HEAD ASSEMBLY,UNLOADER
6	1478-1	2	FLATWASHER
7	5863	2	COUNTERBORE SCREW, 1/2-13 UNC X 4.50, GRADE 8
8	110515-038	1	COPPER TUBE 3/8 O.D.
9	90386-N14	16	COUNTERBORE SCREW, 1/2-13 UNC X 1.25, GRADE 8
10	90386-N15	2	COUNTERBORE SCREW, 1/2-13 UNC X 1.50, GRADE 8
11	110377S125	1	HOODED AIR FILTER/SILENCER
12	5827-2	1	GASKET, CYLINDER TO CRANKCASE
13	21730	2	PIPE ELBOW, 1 NPT X 1 NPT, 90
14	23358	2	TUBE FITTING, MALE CONN, 1 X 1 NPT
15	115038	1	INTERCOOLER
16	114574	2	INTERCOOLER CLAMP
17	123115-06C	2	LOCKWASHER, 3/8
18	123478-L10	2	HEX, SCREW, 3/8-16 UNC X .75, GRADE 5
			OPTIONAL PARTS
	110377F125	1	AIR FILTER
	110377H125	1	AIR FILTER, HOODED
			MAINTENANCE PARTS
	110377E100	1	AIR FILTER ELEMENT
	114984X31L		REPLACEMENT HEAD ASSEMBLY INCLUDES ITEMS 3 & 5, & 8 (1 EACH) PLUS TUBE FITTINGS.
	115038K		INTERCOOLER REPLACEMENT KIT INCLUDES INTERCOOLER, NUTS AND SLEEVES.

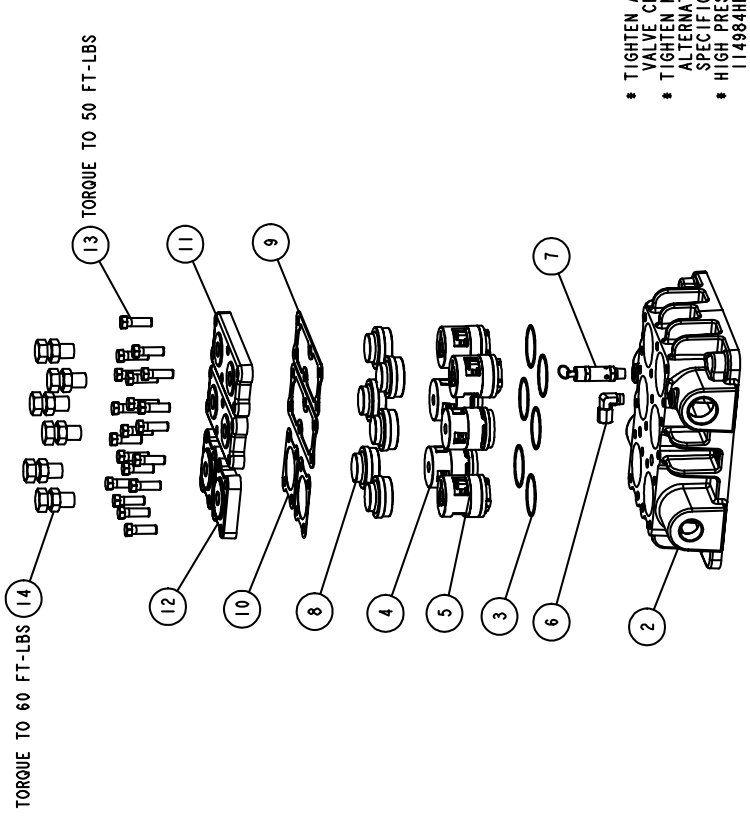
* TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN, EVENLY BRINGING EACH BOLT TO TORQUE IN EQUAL INCREMENTS, WHILE MOVING ABOUT THE BOLT PATTERN.
* HIGH PRESSURE COMPRESSORS AND DNV CERTIFIED APPLICATIONS REQUIRE 114984HP HEAD IN LIEU OF 114984 HEAD AND 6654-1HP CYLINDER IN LIEU OF 6654-1 CYLINDER.



HEAD ASSEMBLY 114984P

(control version P)

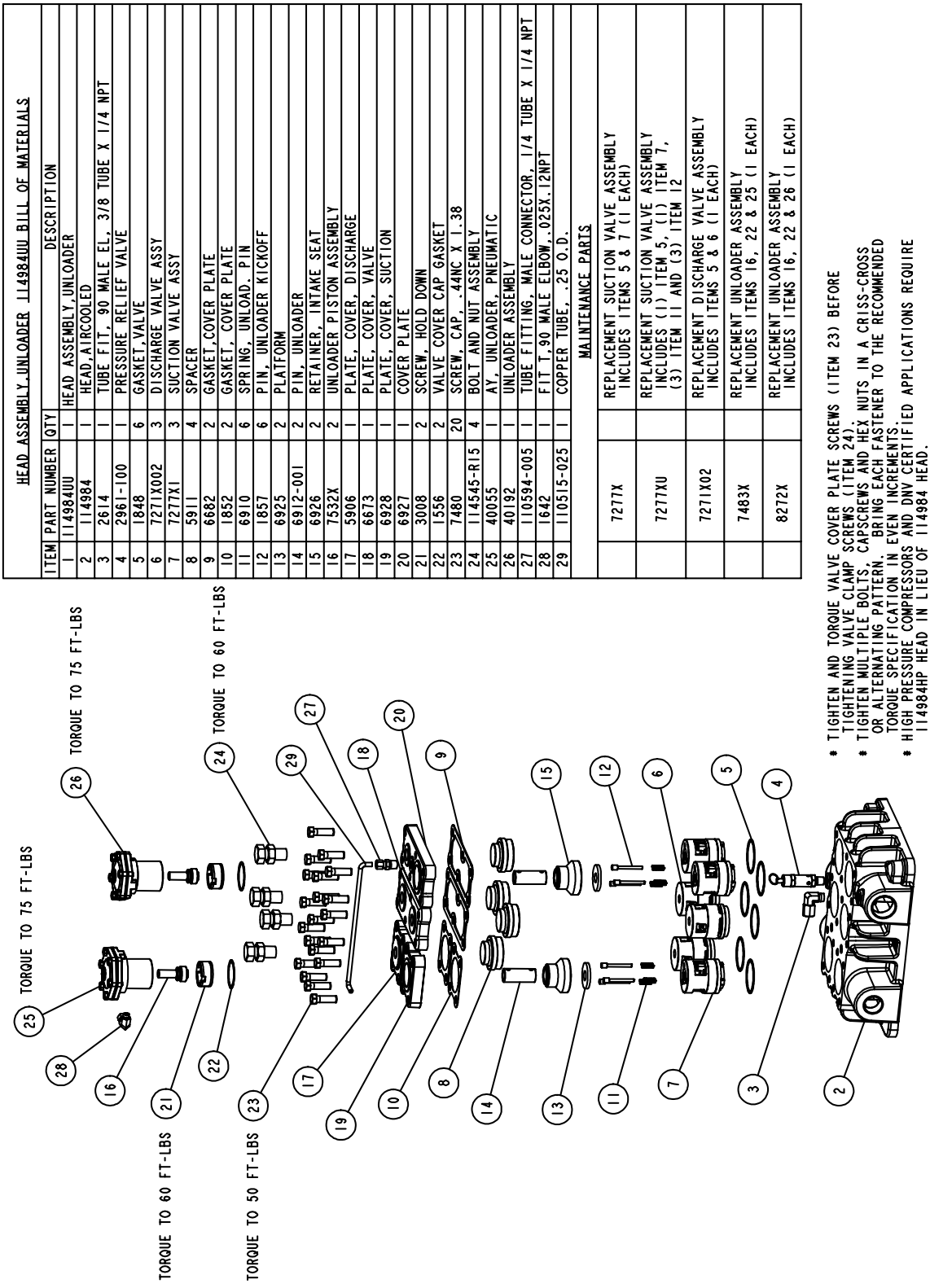
HEAD ASSEMBLY, PLAIN 114984P BILL OF MATERIALS			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	114984P	1	HEAD ASSEMBLY, PLAIN
2	114984	1	HEAD,AIRCOOLED
3	1848	6	GASKET,VALVE
4	7271X002	3	DISCHARGE VALVE ASSY
5	7277X1	3	SUCTION VALVE ASSY
6	2614	1	TUBE FIT, 90 MALE EL, 3/8 TUBE X 1/4 NPT
7	2961-100	1	PRESSURE RELIEF VALVE
8	5911	6	SPACER
9	6682	2	GASKET,COVER PLATE
10	1852	2	GASKET, COVER PLATE
11	6673	2	PLATE, COVER, VALVE
12	5906	2	PLATE, COVER, DISCHARGE
13	7480	20	SCREW, CAP, .44NC X 1.38
14	114545-R15	6	BOLT AND NUT ASSEMBLY
			MAINTENANCE PARTS
	7277X		REPLACEMENT SUCTION VALVE ASSEMBLY INCLUDES ITEMS 3 & 7 (1 EACH)
	7277X02		REPLACEMENT DISCHARGE VALVE ASSEMBLY INCLUDES ITEMS 3 & 4 (1 EACH)



* TIGHTEN AND TORQUE VALVE COVER PLATE SCREWS (ITEM 13) BEFORE TIGHTENING VALVE CLAMP SCREWS (ITEM 14).
* TIGHTEN MULTIPLE BOLTS, CAPSCREWS AND HEX NUTS IN A CRISS-CROSS OR ALTERNATING PATTERN. BRING EACH FASTENER TO THE RECOMMENDED TORQUE SPECIFICATION IN EVEN INCREMENTS.
* HIGH PRESSURE COMPRESSORS AND DNV CERTIFIED APPLICATIONS REQUIRE 114984HP HEAD IN LIEU OF 114984 HEAD.

HEAD ASSEMBLY 114984UU

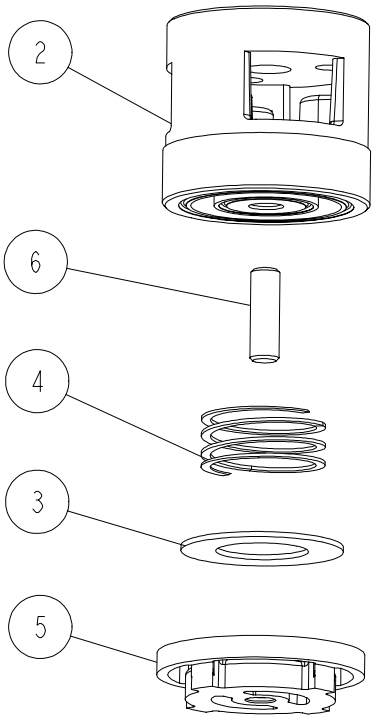
(control versions L, S, LS & LVD)


TORQUE TO 75 FT-LBS
TORQUE TO 75 FT-LBS
TORQUE TO 60 FT-LBS
TORQUE TO 60 FT-LBS
TORQUE TO 50 FT-LBS
* TIGHTEN AND TORQUE VALVE COVER PLATE SCREWS (ITEM 23) BEFORE TIGHTENING VALVE CLAMP SCREWS (ITEM 24).
* TIGHTEN MULTIPLE BOLTS, CAPSCREWS AND HEX NUTS IN A CRISS-CROSS OR ALTERNATING PATTERN. BRING EACH FASTENER TO THE RECOMMENDED TORQUE SPECIFICATION IN EVEN INCREMENTS.
* HIGH PRESSURE COMPRESSORS AND DNV CERTIFIED APPLICATIONS REQUIRE 114984HP HEAD IN LIEU OF 114984 HEAD.

HEAD ASSEMBLY,UNLOADER 114984UU BILL OF MATERIALS

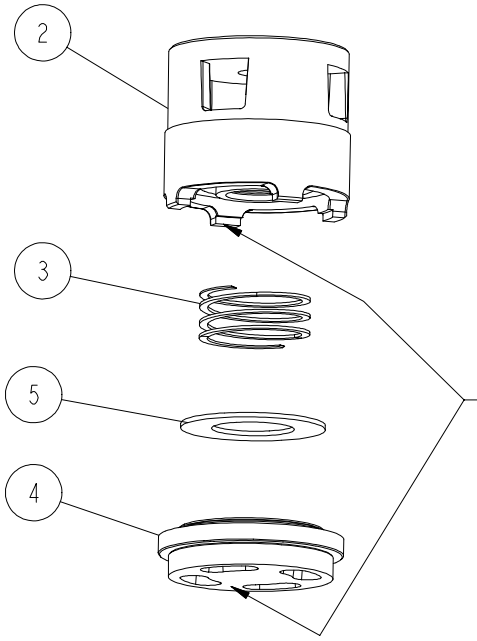
ITEM	PART NUMBER	QTY	DESCRIPTION
1	114984UU	1	HEAD ASSEMBLY,UNLOADER
2	114984	1	HEAD,AIRCOOLED
3	2614	1	TUBE FIT, 90 MALE EL, 3/8 TUBE X 1/4 NPT
4	2961-100	1	PRESSURE RELIEF VALVE
5	1848	6	GASKET,VALVE
6	7271X002	3	DISCHARGE VALVE ASSY
7	7277X1	3	SUCTION VALVE ASSY
8	5911	4	SPACER
9	6682	2	GASKET,COVER PLATE
10	1852	2	GASKET, COVER PLATE
11	6910	6	SPRING, UNLOAD. PIN
12	1857	6	PIN, UNLOADER KICKOFF
13	6925	2	PLATFORM
14	6912-001	2	PIN, UNLOADER
15	6926	2	RETAINER, INTAKE SEAT
16	7532X	2	UNLOADER PISTON ASSEMBLY
17	5906	1	PLATE, COVER, DISCHARGE
18	6673	1	PLATE, COVER, VALVE
19	6928	1	PLATE, COVER, SUCTION
20	6927	1	COVER PLATE
21	3008	2	SCREW, HOLD DOWN
22	1556	2	VALVE COVER CAP GASKET
23	7480	20	SCREW, CAP, .44NC X 1.38
24	114545-R15	4	BOLT AND NUT ASSEMBLY
25	40055	1	AY, UNLOADER, PNEUMATIC
26	40192	1	UNLOADER ASSEMBLY
27	110594-005	1	TUBE FITTING, MALE CONNECTOR, 1/4 TUBE X 1/4 NPT
28	1642	1	FIT T,90 MALE ELBOW,.025X.12NPT
29	110515-025	1	COPPER TUBE, .25 O.D.
			MAINTENANCE PARTS
	7277X		REPLACEMENT SUCTION VALVE ASSEMBLY INCLUDES ITEMS 5 & 7 (1 EACH)
	7277XU		REPLACEMENT SUCTION VALVE ASSEMBLY INCLUDES (1) ITEM 5, (1) ITEM 7, (3) ITEM 11 AND (3) ITEM 12
	7271X02		REPLACEMENT DISCHARGE VALVE ASSEMBLY INCLUDES ITEMS 5 & 6 (1 EACH)
	7483X		REPLACEMENT UNLOADER ASSEMBLY INCLUDES ITEMS 16, 22 & 25 (1 EACH)
	8272X		REPLACEMENT UNLOADER ASSEMBLY INCLUDES ITEMS 16, 22 & 26 (1 EACH)

SUCTION VALVE ASSEMBLY 7277X1



SUCTION VALVE ASSY 7277X1 BILL OF MATERIALS			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	7277X1	1	SUCTION VALVE ASSY
2	1815	1	SUCTION SEAT
3	1846	1	DISC,VALVE
4	7270	1	VALVE SPRING
5	7277	1	BUMPER,VALVE,SUCTION
6	1849	1	STUD,VALVE

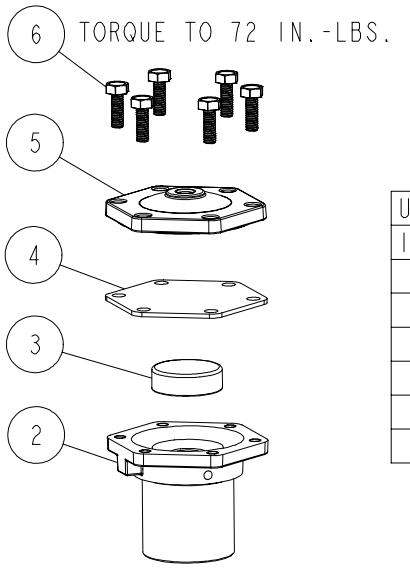
DISCHARGE VALVE ASSEMBLY 7271X002



DISCHARGE VALVE ASSY 7271X002 BILL OF MATERIALS			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	7271X002	1	DISCHARGE VALVE ASSY
2	7271-002	1	BUMPER, DISCHARGE VALVE
3	7270	1	VALVE SPRING
4	1819-002	1	SEAT, DISCHARGE VALVE
5	1846	1	DISC,VALVE

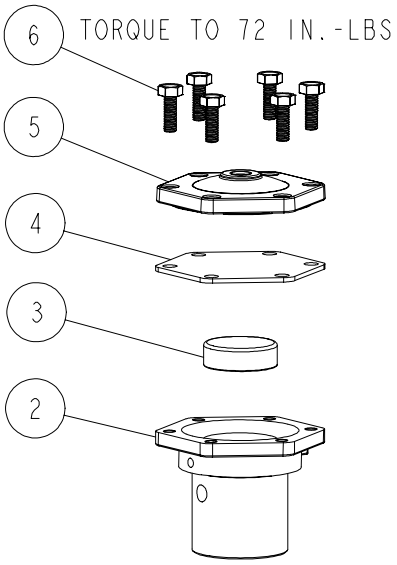
NOTE: TABS ON BUMPER (ITEM 2) SHOULD BE ALIGNED WITH WEBS ON SEAT (ITEM 4) WHEN ASSEMBLING VALVE.

UNLOADER ASSEMBLY 40192



UNLOADER ASSEMBLY 40192 BILL OF MATERIALS			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	40192	1	UNLOADER ASSEMBLY
2	8272	1	BODY, INTAKE UNLOADER VALVE
3	5910	1	CAP, UNLOADER
4	1855	1	DIAPHRAGM
5	1818B	1	PLATE, COVER DIAPHRAGM
6	7499	6	SCREW

PNEUMATIC UNLOADER ASSEMBLY 40055

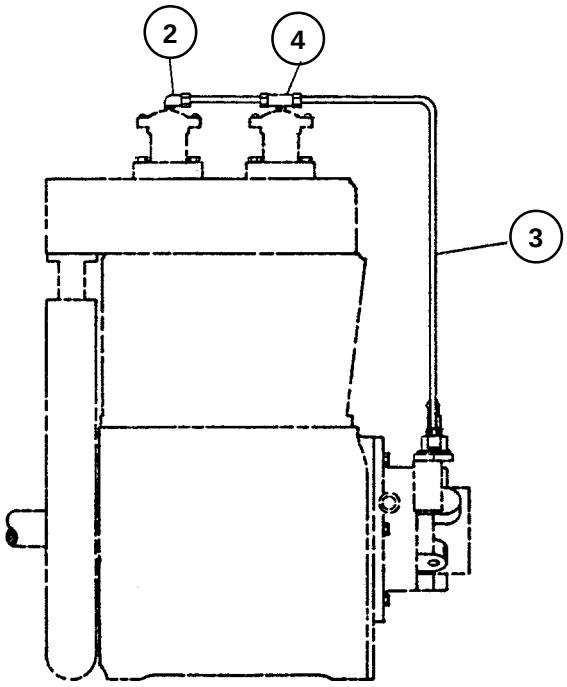


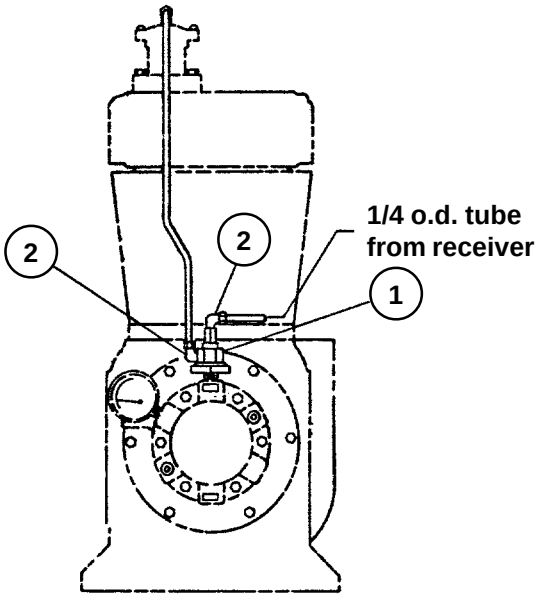
AY, UNLOADER, PNEUMATIC 40055 BILL OF MATERIALS			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	40055	1	AY, UNLOADER, PNEUMATIC
2	7483	1	BODY, UNLOADER
3	5910	1	CAP, UNLOADER
4	1855	1	DIAPHRAGM
5	1818B	1	PLATE, COVER DIAPHRAGM
6	7499	6	SCREW

CONTROL GROUP 110860

(control versions L)

Item Number	Qty.	Part Number	Part Number	Description
		0-200 p.s.i.	**201-500 p.s.i.**	
1	1	110827-001	110827-002	hydraulic unloader assembly
2	3	1642	1642	tube fitting, 90° male elbow, 1/4 tube x 1/8 npt
3	4 ft.	110515-025	110515-025	copper tube, 1/4 o.d.
4	1	1665	1665	tube fitting, male branch tee, 1/4 tube x 1/4 tube x 1/8 npt
				Maintenance Parts
		113225	**113225**	**Hydraulic Unloader Repair Kit** includes diaphragm, stem assembly, inlet filter & fitting assembly, spring (0-200 p.s.i.) and spring (201-500 p.s.i., red color code)
				Parts for Special Applications (for use with diester or phosphate ester synthetic lubricants)
1	1	110827-003		hydraulic unloader assembly (standard, 0-200 p.s.i.)
1	1		110827-004	hydraulic unloader assembly (high pressure, 201-500 p.s.i.)



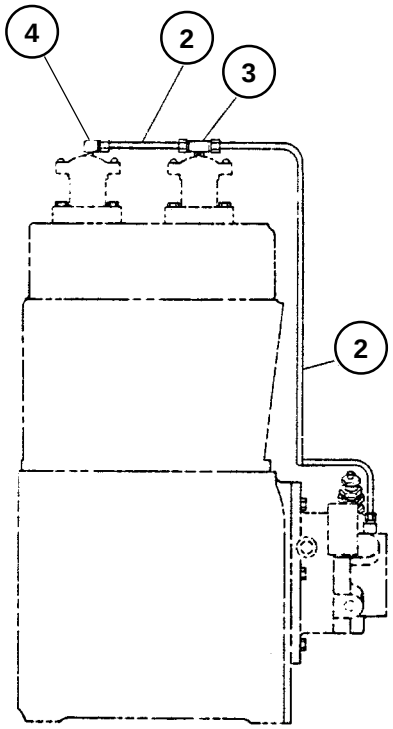


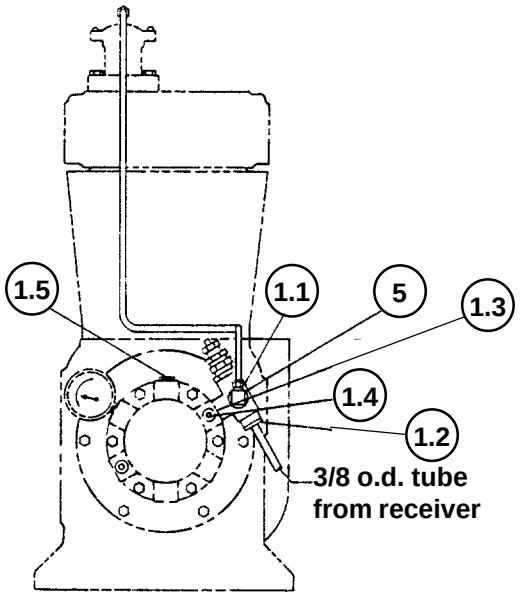
CONTROL GROUP 110857

(control version S)

Item Number	Qty.	Part Number	Part Number	Description
		0-200 p.s.i.	**201-500 p.s.i.**	
1	1	110844	110844-999	pilot valve assembly
* 1.1	1	110832-140	110832-999	pilot valve
1.2	1	2616	2616	tube fitting, straight male connector, 3/8 tube x 1/4 npt
1.3	1	6317	6317	mounting stud
1.4	1	160047-J05	160047-J05	set screw, 1/4-28 unf x .38, grade 5
1.5	1	2719	2719	pipe plug, 1/4 npt, hex socket
2	4 ft.	110515-025	110515-025	copper tube, 1/4 o.d.
3	1	1665	1665	tube fitting, male branch tee, 1/4 tube x 1/4 tube x 1/8 npt
4	1	1642	1642	tube fitting, 90° male elbow, 1/4 tube x 1/8 npt
5	1	2708	2708	tube fitting, 90° male elbow, 1/4 tube x 1/4 npt

* See page 25 for optional pilot valves that must be used with respective pressure ranges.





CONTROL GROUP 110858

(control version LS)

Item Number	Qty.	Part Number	Part Number	Description
		0-200 p.s.i.	**201-500 p.s.i.**	
1	1	110845	110845-001	pilot valve assembly
1.1	1	111422-175	111422-999	pilot valve
1.2	1	110827-001	110827-002	hydraulic unloader assembly
1.3	1	6317	6317	mounting stud
1.4	1	160047-J05	160047-J05	set screw, 1/4-28 unf x .38, grade 5
1.5	1	7361	7361	brass pipe tee, 1/4 npt x 1/4 npt x 1/4 npt
1.6	2	1642	1642	tube fitting, 90° male elbow, 1/4 tube x 1/8 npt
1.7	1 ft.	110515-025	110515-025	copper tube, 1/4 o.d.
1.8	1	124393-004	124393-004	tube fitting, straight male connector, 1/4 tube x 1/8 npt
1.9	1	2708	2708	tube fitting, 90° male elbow, 1/4 tube x 1/4 npt
1.10	1	2616	2616	tube fitting, straight male connector, 3/8 tube x 1/4 npt
2	4 ft.	110515-025	110515-025	copper tube, 1/4 o.d.
3	1	1665	1665	tube fitting, male branch tee, 1/4 tube x 1/4 tube x 1/8 npt
4	1	1642	1642	tube fitting, 90° male elbow, 1/4 tube x 1/8 npt
5	1	2708	2708	tube fitting, 90° male elbow, 1/4 tube x 1/4 npt

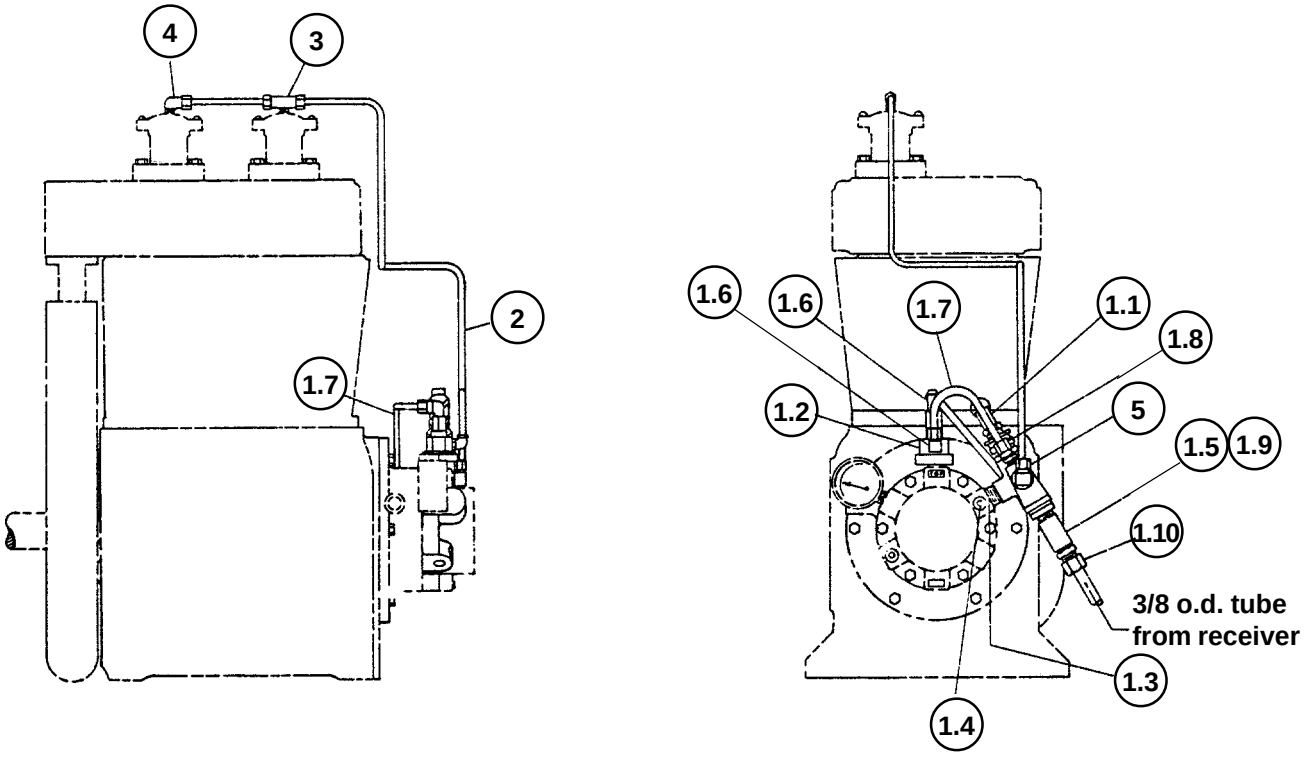
Maintenance Parts

		113225	**113225**	**Hydraulic Unloader Repair Kit** includes diaphragm, stem assembly, inlet filter & fitting assembly, spring (0-200 p.s.i.) and spring (201-500 p.s.i. red color code)

Parts for Special Applications (for use with diester or phosphate ester synthetic lubricants)

1	1	110827-003		hydraulic unloader assembly (standard, 0-200 p.s.i.)
1	1		110827-004	hydraulic unloader assembly (high pressure, 201-500 p.s.i.)

* See page 25 for optional pilot valves that must be used with respective pressure ranges.



CONTROL GROUP 110859

(control version LVD)

Item Number	Qty.	Part Number	Part Number	Description
		0-200 p.s.i.	**201-500 p.s.i.**	
1	1	110846	110846-001	pilot vlave assembly
1.1	1	111423-140	111423-999	pilot valve
1.2	1	110827-001	110827-002	hydraulic unloader assembly
1.3	1	6317	6317	mounting stud
1.4	1	160047-J05	160047-J05	set screw, 1/4-28 unf x .38, grade 5
1.5	1	7361	7361	brass pipe tee, 1/4 npt x 1/4 npt x 1/4 npt
1.6	2	1642	1642	tube fitting, 90° male elbow, 1/4 tube x 1/8 npt
1.7	1 ft.	110515-025	110515-025	copper tube, 1/4 o.d.
1.8	1	124393-004	124393-004	tube fitting, straight male connector, 1/4 tube x 1/8 npt
1.9	1	2708	2708	tube fitting, 90° male elbow, 1/4 tube x 1/4 npt
1.10	1	2616	2616	tube fitting, straight male connector, 3/8 tube x 1/4 npt
2	4 ft.	110515-025	110515-025	copper tube, 1/4 o.d.
3	1	1665	1665	tube fitting, male branch tee, 1/4 tube x 1/4 tube x 1/8 npt
4	1	1642	1642	tube fitting, 90° male elbow, 1/4 tube x 1/8 npt
5	1	2708	2708	tube fitting, 90° male elbow, 1/4 tube x 1/4 npt

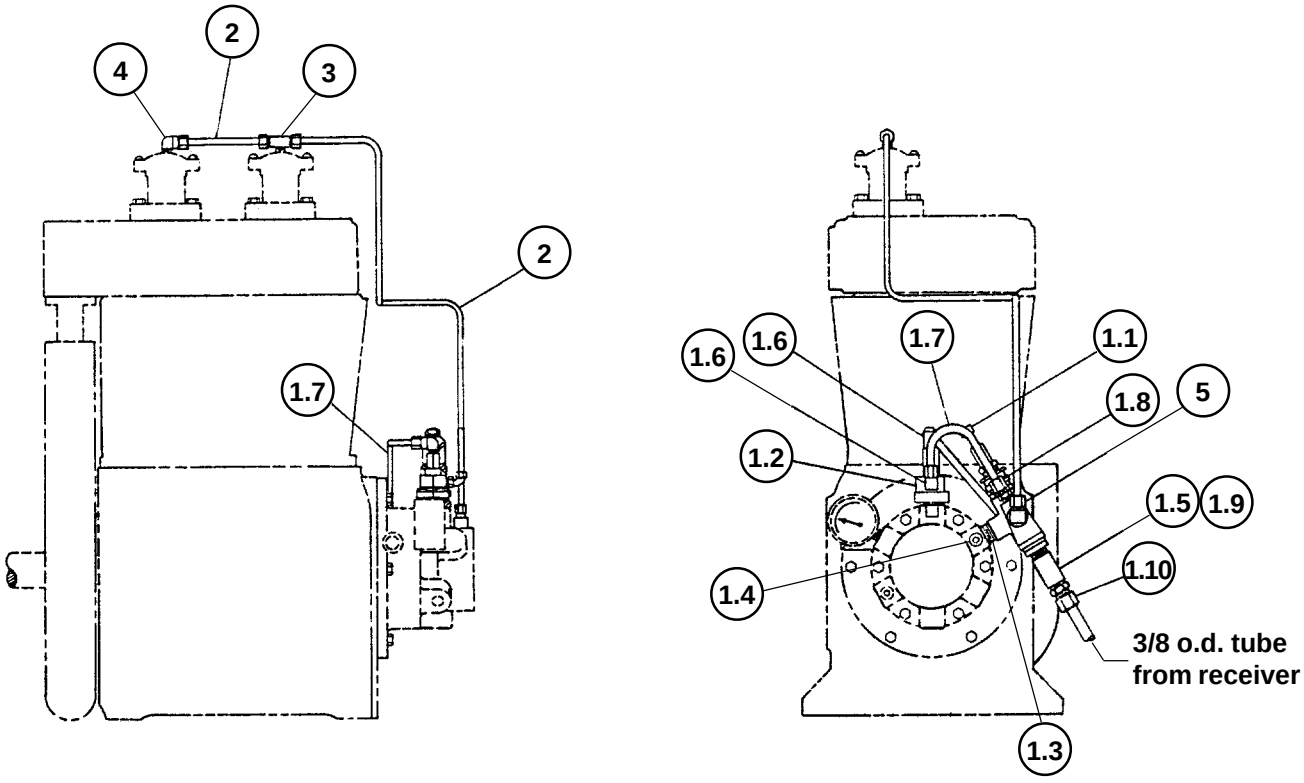
Maintenance Parts

		113225	**113225**	**Hydraulic Unloader Repair Kit** includes diaphragm, stem assembly, inlet filter & fitting assembly, spring (0-200 p.s.i.) and spring (201-500 p.s.i. red color code)

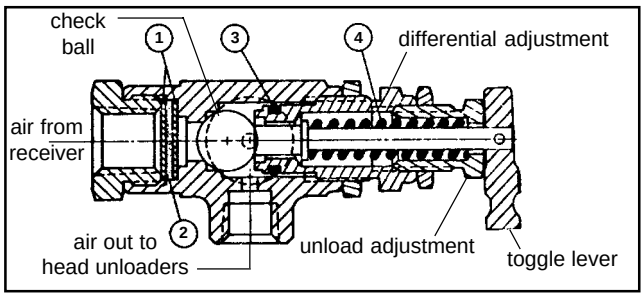
Parts for Special Applications (for use with diester or phosphate ester synthetic lubricants)

1	1	110827-003		hydraulic unloader assembly (standard, 0-200 p.s.i.)
1	1		110827-004	hydraulic unloader assembly (high pressure, 201-500 p.s.i.)

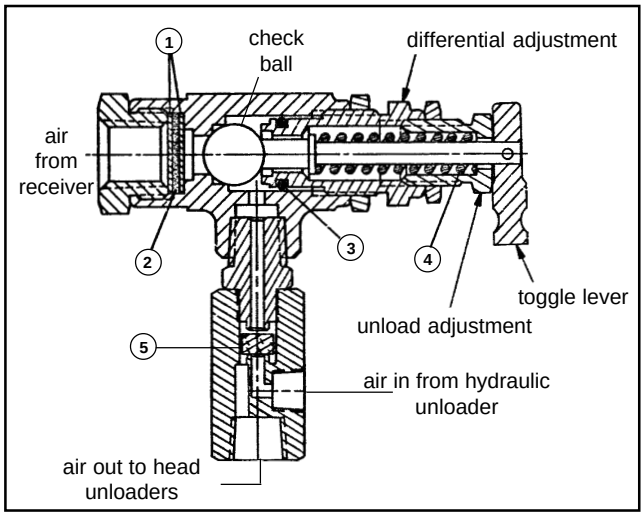
* See page 25 for optional pilot valves that must be used with respective pressure ranges.



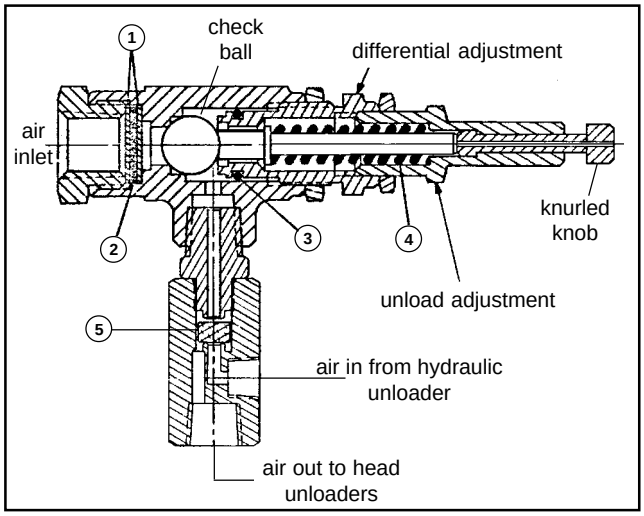
PILOT VALVES



110832 series pilot valve (control version S)



111422 series pilot valve (control version LS)



111423 series pilot valve (control version LVD)

WARNING !

Not all pilots are for use with all compressor systems. Make sure that the pilot you order is set within the safe operating limits of your compressor. Failure to heed this warning could result in an explosion.

Available Pilot Valves

Refer to illustrations at left to determine pilot valve series; add dash # listed below per pressure setting.

Dash #	Pressure Setting (p.s.i.)	Notes
-997	30-70	adjustable unload pressure / customer to set, see differential setting chart
-998	71-150	adjustable unload pressure / customer to set, see differential setting chart
-999	151-400	adjustable unload pressure / customer to set, see differential setting chart
-000	401-500	adjustable unload pressure / customer to set, see differential setting chart

Additional factory preset valves are available upon request.

Pilot Valve Repair Kit 110832-051

Can be used to repair 110832, 111422 & 111423 series pilot valves. Customer must specify which spring when ordering pilot valve repair kit.

Item #	Qty.	Part Number	Description
1	2		screen
2	1		filter
3	1		"o"ring
4	1	110832-052	replacement spring, pilot valve, 30-70 p.s.i. (red)
	1	110832-053	replacement spring, pilot valve, 71-150 p.s.i. (yellow)
	1	110832-054	replacement spring, pilot valve, 151-400 p.s.i. (green)
	1	110832-055	replacement spring, pilot valve, 401-500 p.s.i. (black)
5	1	6196-003	disc

Differential Setting Chart

Spring Part # (item 4)	Unload (p.s.i.)	Min. Dif. (p.s.i.)	Max. Dif. (p.s.i.)
110832-052	30	2	4
"	40	5	8
"	50	5	8
"	60	5	8
"	70	5	10
110832-053	80	5	10
"	90	5	12
"	100	5	13
"	110	5	15
"	120	5	15
"	130	5	18
"	140	5	18
"	150	5	20
110832-054	160	5	15
"	170	5	20
"	175	5	23
"	200	5	25
"	250	10	30
"	300	10	40
"	400	30	50
110832-055	500	40	75

SUCTION VALVE UNLOADER ASSEMBLIES

Description

The Quincy suction valve unloader assembly consists of unloading arrangements on the suction valves, having a plunger to contact the suction valve disc and an unloader pilot valve (part no.s 110832-***, and 111422-*** & 111423-***) to automatically regulate the passing of receiver pressure to the unloading arrangement.

Application

Suction valve unloader assemblies are recommended for use on Quincy compressors where the compressor is to run continuously and a constant pressure is to be maintained. The purpose is to automatically unseat the suction valve of the compressor when the air supply is greater than the demand.

Operation

Unloading occurs when receiver pressure is sufficient to overcome pilot valve spring pressure. The check ball is then unseated, allowing receiver pressure to pass to the unloading arrangements. The compressor will run unloaded until the receiver pressure drops to a predetermined level. At this time, the action of the ball is reversed, shutting off receiver pressure to the unloader arrangement and venting the unloader to atmosphere. This allows the compressor to load. The drive, either electric motor or combustion engine, runs continuously and must be started and stopped manually.

Pilot valve 111423-*** can be locked out, for models equipped with dual control, to provide automatic start/stop operation. The knurled knob at the top of the pilot can be turned clockwise, until it stops, to lock it out. A pressure switch is required to stop the motor. Failure to use a pressure switch, with the pilot valve locked out, could result in unsafe conditions.

WARNING !

A pressure switch must be incorporated whenever pilot valve 111423-* is employed as part of the control system.**

The compressor will operate in the continous run mode if the knurled knob is turned counterclockwise until it stops.

Installation

The pilot valve is to be connected to the air receiver using a minimum of 3/8" o.d. copper tube. Compressors in the field, not equipped with a suction valve unloader assembly, can be converted to constant speed. Consult your local Quincy Compressor Distributor for assistance with conversion procedures.

Service

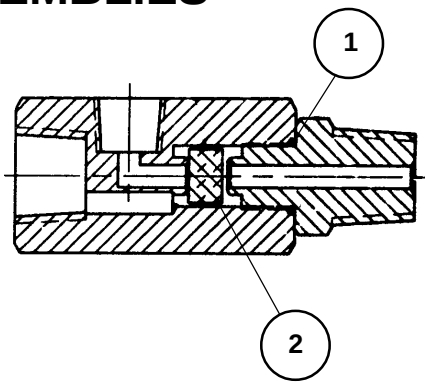
Periodically check the filter & screens in the inlet of the pilot valve to make sure they are free of obstructions. If they become clogged, remove and clean or replace. Inspect the "o"ring located in the opposite end of the pilot valve body for wear or damage; replace if necessary.

Adjustment

The unloading pressure is adjustable and is regulated by turning the hex nut (marked "unload adj." in cross sectional illustrations of pilot valves). Turn the hex nut clockwise to increase and counterclockwise to decrease the unloading pressure.

The differential (difference between unloading and loading pressure) is set by turning the hex nut (marked "differential adj." in the cross sectional illustrations of the pilot valves). Increase the differential pressure by turning the hex nut clockwise - decrease by turning counterclockwise. Tighten the locknuts after adjustment.

CHECK VALVE ASSEMBLIES



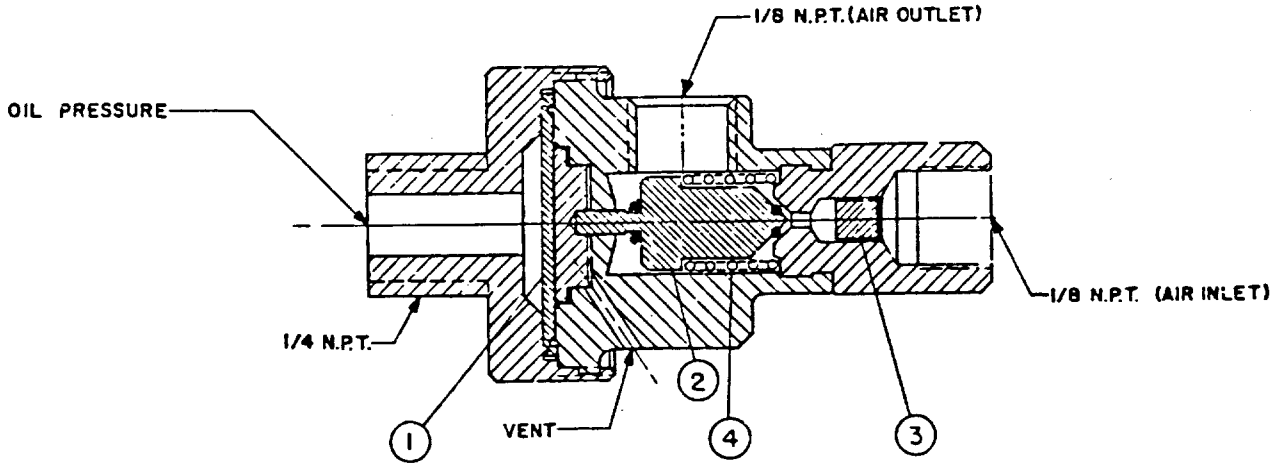
Check Valve Assembly Replacement Parts

Item #	Qty.	Part Number	Description
		6194X2	**Check Valve Assembly**
1	1	123157-010	"o"ring
2	1	6196-002	disc
		6194X3	**Check Valve Assembly**
(for use with diester or phosphate ester synthetic lubricants)			
1	1	22749-010	"o"ring
2	1	6196-003	disc

HYDRAULIC UNLOADER ASSEMBLIES

Hydraulic Unloader 110827-001 & 110827-003*

*for use with diester or phosphate ester synthetic lubricants



Not all hydraulic unloader assemblies are for use with all compressor systems. Make sure that the hydraulic unloader assembly you order is within the operating limits of your system.

Hydraulic Unloader Assembly Repair Kit 113225			
Item #	Qty.	Part Number	Description
1	1		diaphragm
2	1		stem assembly (includes 2 - "o"rings)
3	1		filter assembly (includes fitting & screens)
4	1		spring

Head Kit K340A

Item #	Qty.	Part Number	Description
	6	1846	valve disc
	6	7270	valve spring
	6	1848	gasket, valve
	2	6682	valve cover gasket
	2	1852	gasket, valve cover
	2	1556	gasket, valve
	2	1855	diaphragm
	1	6680	cylinder to head gasket
	1	110377E100	air filter element
	2	5702	intercooler to head gasket

Overhaul Kit K340B

Item #	Qty.	Part Number	Description
	1	110377E100	air filter element
	2	1855	diaphragm
	6	1846	valve disc
	2	6656PR	connecting rod inserts (1 pair)
	6	7270	valve spring
	1	7088	gasket set
	1	6452A	ring set
	1	7595A	ring set

Piston Pin Kit K340E

Item #	Qty.	Part Number	Description
	1	6443SR	con-rod bearing
	1	110190-008	piston pin
	1	110146	piston pin
	2	110799-010	needle bearing
	2	8648	retaining ring

Recommended Spare Parts

Item #	Qty.	Part Number	Description
	3	7277X	replacement suction valve assy.
	3	7271X02	replacement discharge valve assy.
	1	110822	pressure gauge
	1	160079	oil pump repair kit
	1	7088	gasket set
	1	113225	hydraulic unloader repair kit
	2	6656PR	connecting rod inserts (1 pair)
	2	1855	unloader diaphragm
	1	110832-051	pilot repair kit
	1	110377E100	air filter element

V.I.P. Kit 110516-340

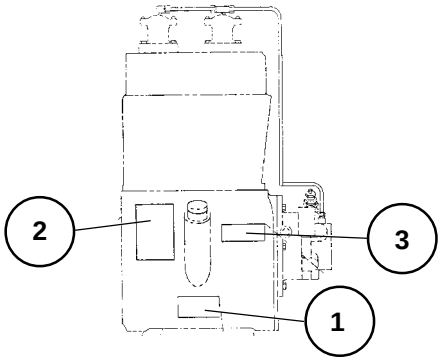
Item #	Qty.	Part Number	Description
	1	110822	oil pressure gauge
	2	1855	diaphragm
	6	1857	valve pin
	6	1846	valve disc
	2	6283	hydraulic unloader filter
	6	7270	valve spring
	6	6910	valve spring
	1	7088	gasket set

Basic Compressor Repair Kit 110823-340

Item #	Qty.	Part Number	Description
	1	110190-008	piston pin
	1	110377E100	air filter element
	1	110774	"o"ring kit
	1	110814	oil filter
	1	2720	bearing cup
	1	2788	bearing cone
	1	3720	bearing cup
	1	40775	bearing cone
	2	6443SR	connecting rod bushing
	2	6656PR	connecting rod inserts (1 pair)
	6	7270	valve spring
	1	7088	gasket set
	1	6452	ring set
	6	1846	valve disc
	1	110146	piston pin
	1	7595	ring set

Gasket Set 7088

Item #	Qty.	Part Number	Description
	2	1315	inspection plate gasket
	3	1383	bearing adj. shim, .005 steel
	5	1383A	bearing adj. shim, .007 steel
	3	1383B	bearing adj. shim, .020 steel
	2	1383D	bearing adj. shim, .002 steel
	2	1556	gasket
	6	1848	valve gasket
	2	1852	valve cover gasket
	1	5502	gasket
	1	5827-2	gasket, cylinder to crankcase
	2	5828	gasket, companion flange
	1	5702	gasket, intercooler to head
	1	6679	gasket, oil inlet bracket
	2	6682	valve cover gasket
	1	6680	gasket, cylinder to head



Decals

Item #	Qty.	Part Number	Description
1	1	110831	serial number & nameplate
2	1	127889-A	decal, CAUTION!/manual/ "Failure to follow..."
3	1	127889-B	decal, DANGER! / "Air used for breathing..."

* Not sold separate; order 127889.

TYPICAL UNIT REPAIR PARTS LIST

The parts listed here are for standard QR 340 (up to 175 p.s.i.) units and may or may not be applicable to custom built units. Check with your local authorized Quincy Compressor Distributor for parts that can be used for custom built units. Make sure the components you order are rated within the safe operating limits of your system. If you are doubtful about which components to order, contact you local Quincy distributor.

(QR 340 simplex - horizontal tank - electric motor)

Qty	Part Number	Part Number	Part Number	Description
	80 gal.	**120 gal.**		
1	113269-200	113271-200		tank (200 p.s.i. max. working pressure)
1	113276	* 113280		top plate
1	2713	111136-050		tank drain valve
1	111136-100	111136-100		ball valve
1	110514-300	110514-300		pressure gauge
1	110512-003	110512-003	§	pressure switch (135-175 p.s.i.)
1	110513-200	110513-200		pressure relief valve (200 p.s.i.)
3.5 ft.	110515-100	110515-100	!	discharge tube (1" copper tube to be formed by customer)
2	111265-100	111265-100		ferrule (for discharge tube)
	7.5 H.P.			
2	*110258B082*			drive belt
1	*3202*			motor pulley
1	*111967K002*			belt guard assembly
1	110484			motor pulley bushing
	200v, 3Ø	**230/460v, 3Ø**		
1	*8393*	*124517-009*		7.5 h.p. motor (O.D.P.)

(QR 340 duplex - horizontal tank - electric motor)

Qty	Part Number	Part Number	Part Number	Description
	120 gal.	**200 gal.**		
1	113467-200	113469-200		tank (200 p.s.i. max. working pressure)
2	*113280*	*113280*		top plate
1	111136-050	111136-050		tank drain valve
1	111136-100	111136-100		ball valve
1	110514-300	110514-300		pressure gauge
2	110512-003	110512-003		pressure switch (135-175 p.s.i.)
1	110513-200	110513-200		pressure relief valve (200 p.s.i.)
7 ft.	110515-100	110515-100	!	discharge tube (1" copper tube to be formed by customer)
2	111265-100	111265-100		ferrule (for discharge tube)
	7.5 H.P.			
4	*110258B082*			drive belt
2	*3202*			motor pulley
2	*111967K002*			belt guard assembly
1	110484			motor pulley bushing
	200v, 3Ø	**230/460v, 3Ø**		
2	*8393*	*124517-009*		7.5 h.p. motor (O.D.P.)

* 113280 top plate is also used for all QR 340 base mounted electric motor driven units.

§ 2298-175 pressure switch on base mounted units.

Part numbers shown in italics apply to tank mounted units and base mounted units.

! Pre-formed discharge tubes are available. Contact factory with model & tank size information.

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